

FILE 'BIOSIS, MEDLINE, CAPLUS, EMBASE' ENTERED AT 15:54:28 ON 28 AUG 2002

L13 3892 PHOSPHATIDYLINOSITOL-4-PHOSPHATE  
L14 1001 5-KINASE  
L15 652 L13 AND L14  
L16 268 EC 2.7.1.68  
L17 58 PIP 5-KINASE  
L18 74061 ANTISENSE  
L19 14625 RIBOZYME  
L20 4 L15 AND L18  
L21 4 DUP REM L20 (0 DUPLICATES REMOVED)  
L22 2 L15 AND L19  
L23 0 L16 AND L18  
L24 0 L16 AND L19  
L25 0 L17 AND L18  
L26 0 L17 AND L19

L12 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2002:369320 CAPLUS  
DOCUMENT NUMBER: 136:381056  
TITLE: The contribution of 700,000 ORF sequence tags to the definition of the human transcriptome  
AUTHOR(S): Camargo, Anamaria A.; Samaia, Helena P. B.; Dias-Neto, Emmanuel; Simao, Daniel F.; Migotto, Italo A.; Briones, Marcelo R. S.; Costa, Fernando F.; Nagai, Maria Aparecida; Verjovski-Almeida, Sergio; Zago, Marco A.; Andrade, Luis Eduardo C.; Carrer, Helaine; El-Dorry, Hamza F. A.; Espreafico, Enilza M.; Habr-Gama, Angelita; Giannella-Neto, Daniel; Goldman, Gustavo H.; Gruber, Arthur; Hackel, Christine; Kimura, Edna T.; Maciel, Rui M. B.; Marie, Suely K. N.; Martins, Elizabeth A. L.; Nobrega, Marina P.; Paco-Larson, Maria Luisa; Pardini, Maria Ines M. C.; Pereira, Goncalo G.; Pesquero, Joao Bosco; Rodrigues, Vanderlei; Rogatto, Silvia R.; Da Silva, Ismael D. C. G.; Sogayar, Mari C.; Sonati, Maria De Fatima; Tajara, Eloiza H.; Valentini, Sandro R.; Alberto, Fernando L.; Amaral, Maria Elisabete J.; Aneas, Ivy; Arnaldi, Liliane A. T.; De Assis, Angela M.; Bengtson, Mario Henrique; Bergamo, Nadia Aparecida; Bombonato, Vanessa; De Camargo, Maria E. R.; Canevari, Renata A.; Carraro, Dirce M.; Cerutti, Janete M.; Correa, Maria Lucia C.; Correa, Rosana F. R.; Costa, Maria Cristina R.; Curcio, Cyntia; Hokama, Paula O. M.; Ferreira, Ari J. S.; Furuzawa, Gilberto K.; Gushiken, Tsieko; Ho, Paulo L.; Kimura, Elza; Krieger, Jose E.; Leite, Luciana C. C.; Majumder, Paromita; Marins, Mozart; Marques, Everaldo R.; Melo, Analy S. A.; Melo, Monica; Mestriner, Carlos Alberto; Miracca, Elisabete C.; Miranda, Daniela C.; Nascimento, Ana Lucia T. O.; Nobrega, Francisco G.; Ojopi, Elida P. B.; Pandolfi, Jose Rodrigo C.; Pessoa, Luciana G.; Prevedel, Aline C.; Rahal, Paula; Rainho, Claudia A.; Reis, Eduardo M. R.; Ribeiro, Marcelo L.; Da Ros, Nancy; De Sa, Renata G.; Sales, Magaly M.; Sant'anna, Simone Cristina; Dos Santos, Mariana L.; Da Silva, Aline M.; Da Silva, Neusa P.; Silva, Wilson A., Jr.; Da Silveira, Rosana A.; Sousa, Josane F.; Stecconi, Daniella; Tsukumo, Fernando; Valente, Valeria; Soares, Fernando; Moreira, Eloisa S.; Nunes, Diana N.; Correa, Ricardo G.; Zalcberg, Heloisa; Carvalho, Alex F.; Reis, Luis F. L.; Brentani, Ricardo R.; Simpson, Andrew J. G.; De Souza, Sandro J.  
CORPORATE SOURCE: Ludwig Institute for Cancer Research, Sao Paulo, 01509-010, Brazil  
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2001), 98(21), 12103-12108  
CODEN: PNASA6; ISSN: 0027-8424  
PUBLISHER: National Academy of Sciences  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Open reading frame expressed sequences tags (ORESTES) differ from conventional ESTs by providing sequence data from the central protein coding portion of transcripts. A total of 696,745 ORESTES sequences were generated from 24 human tissues and a subset of the data that correspond to a set of 15,095 full-length mRNAs used as a means of assessing the efficiency of the strategy and its potential contribution to the definition of the human transcriptome. It was estd. that ORESTES sampled over 80% of all highly and moderately expressed, and between 40% and 50% of rarely expressed, human genes. In the most thoroughly sequenced tissue, the breast, the 130,000 ORESTES generated are derived from

transcripts from an estd. 70% of all genes expressed in that tissue, with an equally efficient representation of both highly and poorly expressed genes. In this respect, the capacity of the ORESTES strategy both for gene discovery and shotgun transcript sequence generation significantly exceeds that of conventional ESTs. The distribution of ORESTES is such that many human transcripts are now represented by a scaffold of partial sequences distributed along the length of each gene product. The exptl. joining of the scaffold components, by reverse transcription-PCR, represents a direct route to transcript finishing that may represent a useful alternative to full-length cDNA cloning. [This abstr. record is one of many records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

L12 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:321987 CAPLUS  
DOCUMENT NUMBER: 135:148100  
TITLE: Verification and initial annotation of the NIA mouse  
15K cDNA clone set  
AUTHOR(S): Kargul, George J.; Dudekula, Dawood B.; Qian, Yong;  
Lim, Meng K.; Jaradat, Saied A.; Tanaka, Tetsuya S.;  
Carter, Mark G.; Ko, Minoru S. H.  
CORPORATE SOURCE: Developmental Genomics and Aging Section, Laboratory  
of Genetics, National Institute on Aging, National  
Institutes of Health, Baltimore, MD, USA  
SOURCE: Nature Genetics (2001), 28(1), 17-18  
CODEN: NGENEC; ISSN: 1061-4036

PUBLISHER: Nature America Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A set of 15,247 unique oligo(dT)-primed cDNA clones (NIA Mouse 15K) based on 52,374 3'-expressed sequence tags (ESTs) has been made available for expression profiling in mouse models. To verify clone identity and obtain protein-coding information, the cDNA clones were resequenced, with an av. insert size of 1.5 kb, from both 3' and 5' ends (GenBank Accession Nos. BG062929-BG088954). Of 13,968 clones that were verifiable, 4.1% had correctable addressing errors or ambiguous addresses. Using all available sequence information to characterize the cDNA clone set indicated that up to 75% of mammalian genes in the public database are included in this set, and the remaining 3653 ESTs very likely represent novel genes that can be studied by expression profiling with the 15K microarray. All available information about individual cDNAs in this cDNA microarray are available through NCBI and MGD and in an ORACLE relational database accessible through the web site <http://lgsun.grc.nia.nih.gov/cgi-bin/pro1>. [This abstr. record is one of 6 records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:576531 CAPLUS  
DOCUMENT NUMBER: 133:160369  
TITLE: Genome-wide expression profiling of mid-gestation  
placenta and embryo using a 15,000 mouse developmental  
cDNA microarray  
AUTHOR(S): Tanaka, Tetsuya S.; Jaradat, Saied A.; Lim, Meng K.;  
Kargul, George J.; Wang, Xiaohong; Grahovac, Marija  
J.; Pantano, Serafino; Sano, Yuri; Piao, Yulan;  
Nagaraja, Ramaiah; Doi, Hirofumi; Wood, William H.,  
III; Becker, Kevin G.; Ko, Minoru S. H.  
CORPORATE SOURCE: Laboratory of Genetics, National Institutes of Health,  
Baltimore, MD, 21224-5820, USA  
SOURCE: Proceedings of the National Academy of Sciences of the

United States of America (2000), 97(16), 9127-9132  
CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER: National Academy of Sciences  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Complementary DNA microarray technol. has been increasingly used to monitor global gene expression patterns in various tissues and cell types. However, applications to mammalian development have been hampered by the lack of appropriate cDNA collections, particularly for early developmental stages. To overcome this problem, a PCR-based cDNA library construction method was used to derive 52,374 expressed sequence tags from pre- and peri-implantation embryos, embryonic day (E) 12.5 female gonad/mesonephros, and newborn ovary. From these cDNA collections, a microarray representing 15,264 unique genes (78% novel and 22% known) was assembled. In initial applications, the divergence of placental and embryonic gene expression profiles was assessed. At stage E12.5 of development, based on triplicate expts., 720 genes (6.5%) displayed statistically significant differences in expression between placenta and embryo. Among 289 more highly expressed in placenta, 61 placenta-specific genes encoded, for example, a novel prolactin-like protein. The no. of genes highly expressed (and frequently specific) for placenta has thereby been increased 5-fold over the total previously reported, illustrating the potential of the microarrays for tissue-specific gene discovery and anal. of mammalian developmental programs. The sequences of the expressed sequence tags are available in the GenBank database at Accession Nos. AW537829-AW545916, AW535144-AW537732, AW545922-AW559162, and AF272368. [This abstr. record is one of 6 records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

=> d his

(FILE 'HOME' ENTERED AT 15:45:33 ON 28 AUG 2002)

FILE 'REGISTRY' ENTERED AT 15:45:43 ON 28 AUG 2002

FILE 'CAPLUS' ENTERED AT 15:45:46 ON 28 AUG 2002  
S CTTGCGCCCAGACCAAGCCA/SQSN

L1 FILE 'REGISTRY' ENTERED AT 15:47:01 ON 28 AUG 2002  
5 S CTTGCGCCCAGACCAAGCCA/SQSN **SEQ ID 10**

L2 FILE 'CAPLUS' ENTERED AT 15:48:24 ON 28 AUG 2002  
1 S L1  
S TGATGGGCATGCCAGAGGCA/SQSN

L3 FILE 'REGISTRY' ENTERED AT 15:49:25 ON 28 AUG 2002  
6 S TGATGGGCATGCCAGAGGCA/SQSN **SEQ ID 21**

L4 FILE 'CAPLUS' ENTERED AT 15:49:56 ON 28 AUG 2002  
1 S L3  
S GCCTGCACACAGTACAGTCC/SQSN

L5 FILE 'REGISTRY' ENTERED AT 15:50:43 ON 28 AUG 2002  
0 S GCCTGCACACAGTACAGTCC/SQSN **SEQ ID 35**

L6 FILE 'CAPLUS' ENTERED AT 15:51:02 ON 28 AUG 2002  
0 S L5  
0 AACTTTTGAAAGGAGAAGGSQSN  
S AACTTTTGAAAGGAGAAGG/SQSN

L7 FILE 'REGISTRY' ENTERED AT 15:51:44 ON 28 AUG 2002  
1 S AACTTTTGAAAGGAGAAGG/SQSN **SEQ 50**

L8 FILE 'CAPLUS' ENTERED AT 15:52:03 ON 28 AUG 2002  
1 S L8  
S GGGTGAACCTCTGACTCTGCA/SQSN

L9 FILE 'REGISTRY' ENTERED AT 15:52:40 ON 28 AUG 2002  
16 S GGGTGAACCTCTGACTCTGCA/SQSN **SEQ ID 62**

L10 FILE 'CAPLUS' ENTERED AT 15:52:59 ON 28 AUG 2002  
3 S L10  
3 DUP REM L11 (0 DUPLICATES REMOVED)

L20 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2002:539817 CAPLUS  
 DOCUMENT NUMBER: 137:90191  
 TITLE: Identification, cloning, characterization and therapeutic use of a human **phosphatidylinositol 4-phosphate 5-kinase** family member 56634  
 INVENTOR(S): Meyers, Rachel A.; Rudolph-Owen, Laura A.  
 PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., USA  
 SOURCE: PCT Int. Appl., 122 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002055682	A2	20020718	WO 2001-US47782	20011113
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2000-248325P P 20001114  
 AB The invention provides isolated nucleic acids mols., designated 56634 nucleic acid mols., which encode novel **phosphatidylinositol 4-phosphate 5-kinase** members. The cDNA sequence and the encoded amino acid sequence of a human **phosphatidylinositol 4-phosphate 5-kinase** homolog 56634 (clone Fbh56634FL) are disclosed. Tissue-specific expression profiles, and structural motifs of the polypeptide are provided. The invention also provides antisense nucleic acid mols., recombinant expression vectors contg. 56634 nucleic acid mols., host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 56634 gene has been introduced or disrupted. The invention still further provides isolated 56634 proteins, fusion proteins, antigenic peptides and anti-56634 antibodies. Diagnostic methods utilizing compns. of the invention are also provided.

L20 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2002:521952 CAPLUS  
 DOCUMENT NUMBER: 137:74468  
 TITLE: Human **phosphatidylinositol-4-phosphate 5-kinase** and cDNA and drug screening targeted to regulation and other therapeutic application for related diseases  
 INVENTOR(S): Zhu, Zhimin  
 PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany  
 SOURCE: PCT Int. Appl., 127 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2002053714 A2 20020711 WO 2001-EP15321 20011227  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,  
 TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 PRIORITY APPLN. INFO.: US 2001-259217P P 20010103  
 US 2001-331474P P 20011116

**AB A human phosphatidylinositol-4-phosphate**

5-kinase and cDNA and sequence homologs thereof are disclosed. The mRNA expression profile in various human tissues is provided. Methods for expressing and prep. related products using recombinant cells are described. These recombinant cells, the enzyme, or nucleic acids encoding the enzyme are useful in screening for modulators of the enzymic activity or gene expression. Methods of screening for its modulators and using them for the treatment of various disease and their effectiveness (in vivo testing of compds./target validation) are described. Reagents that regulate human phosphatidylinositol-4-phosphate 5-kinase and reagents which bind to human phosphatidylinositol-4-phosphate 5-kinase gene products can play a role in preventing, ameliorating, or correcting dysfunctions or diseases including, but not limited to, cancer, asthma, and COPD.

L20 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2001:816855 CAPLUS  
 DOCUMENT NUMBER: 135:353850  
 TITLE: Protein and cDNA sequences of 13 kDa human  
**phosphatidylinositol-4-phosphate-5-kinase**  
 isoenzyme II .beta. subunit (PIP<sub>II</sub>.beta.)-like  
 protein and therapeutic use thereof  
 Inventor(s): Mao, Yumin; Xie, Yi  
 Patent Assignee(s): Shanghai Biowindow Gene Development Inc., Peop. Rep.  
 China  
 SOURCE: PCT Int. Appl., 35 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001083688	A2	20011108	WO 2001-CN648	20010428
WO 2001083688	A3	20020103		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CN 1321756	A	20011114	CN 2000-115550	20000429

PRIORITY APPLN. INFO.: CN 2000-115550 A 20000429  
 AB The invention provides protein and cDNA sequences for 13 kDa novel human  
 protein cloned from fetal brain, and which have similar expression pattern

with human PIPKII. $\beta$ -like proteins (PIPKII. $\beta$ .). The invention also relates to constructing PIPKII. $\beta$ -like protein gene expression vectors to prep. recombinant PIPKII. $\beta$ -like protein using prokaryote or eukaryote cells. Methods of expressing and prep. recombinant PIPKII. $\beta$ -like protein and its antibody are described. Methods of using PIPKII. $\beta$ -like protein or genes for the treatment of various kinds of diseases, such as cancer, blood diseases, HIV infection, immune diseases and inflammation are also disclosed.

L20 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1999:672845 CAPLUS  
 DOCUMENT NUMBER: 131:309275  
 TITLE: Nucleic acid sequences and proteins associated with aging in human cells  
 INVENTOR(S): Burmer, Glenna C.; Brown, Joseph P.  
 PATENT ASSIGNEE(S): Lifespan Biosciences, Inc., USA  
 SOURCE: PCT Int. Appl., 87 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9952929	A1	19991021	WO 1999-US8314	19990415
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2323934	AA	19991021	CA 1999-2323934	19990415
AU 9935639	A1	19991101	AU 1999-35639	19990415
EP 1071698	A1	20010131	EP 1999-917547	19990415
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002511240	T2	20020416	JP 2000-543485	19990415
PRIORITY APPLN. INFO.:			US 1998-81887P	P 19980415
			US 1999-292758	A 19990414
			WO 1999-US8314	W 19990415

AB This invention relates to the discovery of nucleic acids assocd. with cell proliferation, cell cycle arrest, cell death, and aging-related diseases such as progeria and Werner syndrome. Such sequences can be used to det. the aging status of a cell population, e.g., whether a cell is aging or is undergoing senescence. Moreover, the present invention provides sequences indicative of the proliferation state or youth of a cell. In addn. the present invention provides sequences assocd. with the aging of skin cells and, in particular, fibroblast cells. The isolated nucleic acids can be used to det. the aging status of a cell population. In addnl., they can also be targeted and their level of expression altered by, for example, gene therapy methods. Such methods can be used to slow or stop the aging process of the cell population, to arrest the growth of a proliferating cell population such as a tumor cell population, to promote division in cells which are prematurely arrested, to det. that a cell population is healthy and rapidly dividing, and to det. that a cell population is not dividing and proliferating. Further, the present invention provides isolated nucleic acids assocd. with cyclin A.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2002:521952 CAPLUS  
 DOCUMENT NUMBER: 137:74468  
 TITLE: Human phosphatidylinositol-4-phosphate 5-kinase and  
       cDNA and drug screening targeted to regulation and  
       other therapeutic application for related diseases  
 INVENTOR(S): Zhu, Zhimin  
 PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany  
 SOURCE: PCT Int. Appl., 127 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002053714	A2	20020711	WO 2001-EP15321	20011227
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.: US 2001-259217P P 20010103 US 2001-331474P P 20011116				

AB A human phosphatidylinositol-4-phosphate 5-kinase and cDNA and sequence homologs thereof are disclosed. The mRNA expression profile in various human tissues is provided. Methods for expressing and prep. related products using recombinant cells are described. These recombinant cells, the enzyme, or nucleic acids encoding the enzyme are useful in screening for modulators of the enzymic activity or gene expression. Methods of screening for its modulators and using them for the treatment of various disease and their effectiveness (in vivo testing of compds./target validation) are described. Reagents that regulate human phosphatidylinositol-4-phosphate 5-kinase and reagents which bind to human phosphatidylinositol-4-phosphate 5-kinase gene products can play a role in preventing, ameliorating, or correcting dysfunctions or diseases including, but not limited to, cancer, asthma, and COPD.

L22 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1999:672845 CAPLUS  
 DOCUMENT NUMBER: 131:309275  
 TITLE: Nucleic acid sequences and proteins associated with aging in human cells  
 INVENTOR(S): Burmer, Glenna C.; Brown, Joseph P.  
 PATENT ASSIGNEE(S): Lifespan Biosciences, Inc., USA  
 SOURCE: PCT Int. Appl., 87 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9952929	A1	19991021	WO 1999-US8314	19990415

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,  
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
CI, CM, GA, GN, ML, MR, NE, SN, TD, TG  
CA 2323934 AA 19991021 CA 1999-2323934 19990415  
AU 9935639 A1 19991101 AU 1999-35639 19990415  
EP 1071698 A1 20010131 EP 1999-917547 19990415  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI  
JP 2002511240 T2 20020416 JP 2000-543485 19990415  
PRIORITY APPLN. INFO.: US 1998-81887P P 19980415  
US 1999-292758 A 19990414  
WO 1999-US8314 W 19990415

AB This invention relates to the discovery of nucleic acids assocd. with cell proliferation, cell cycle arrest, cell death, and aging-related diseases such as progeria and Werner syndrome. Such sequences can be used to det. the aging status of a cell population, e.g., whether a cell is aging or is undergoing senescence. Moreover, the present invention provides sequences indicative of the proliferation state or youth of a cell. In addn. the present invention provides sequences assocd. with the aging of skin cells and, in particular, fibroblast cells. The isolated nucleic acids can be used to det. the aging status of a cell population. In addnl., they can also be targeted and their level of expression altered by, for example, gene therapy methods. Such methods can be used to slow or stop the aging process of the cell population, to arrest the growth of a proliferating cell population such as a tumor cell population, to promote division in cells which are prematurely arrested, to det. that a cell population is healthy and rapidly dividing, and to det. that a cell population is not dividing and proliferating. Further, the present invention provides isolated nucleic acids assocd. with cyclin A.

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AB Open reading frame expressed sequences tags (ORESTES) differ from conventional ESTs by providing sequence data from the central protein coding portion of transcripts. A total of 696,745 ORESTES sequences were generated from 24 human tissues and a subset of the data that correspond to a set of 15,095 full-length mRNAs used as a means of assessing the efficiency of the strategy and its potential contribution to the definition of the human transcriptome. It was estd. that ORESTES sampled over 80% of all highly and moderately expressed, and between 40% and 50% of rarely expressed, human genes. In the most thoroughly sequenced tissue, the breast, the 130,000 ORESTES generated are derived from

transcripts from an estd. 70% of all genes expressed in that tissue, with an equally efficient representation of both highly and poorly expressed genes. In this respect, the capacity of the ORESTES strategy both for gene discovery and shotgun transcript sequence generation significantly exceeds that of conventional ESTs. The distribution of ORESTES is such that many human transcripts are now represented by a scaffold of partial sequences distributed along the length of each gene product. The exptl. joining of the scaffold components, by reverse transcription-PCR, represents a direct route to transcript finishing that may represent a useful alternative to full-length cDNA cloning. [This abstr. record is one of many records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].